

The Ottawa Free Trader.

Entered at the Post Office at Ottawa, Illinois, as Second Class Mail Matter.

From Wallace.

WALLACE, March 14.—Your reporter, after a visit of two weeks in the East, returned home much pleased with his trip. The deaths of Thos. O'Donnell and Alice Pennessy, which took place but a short time ago, was a shock to the community. By all appearances they had robust constitutions and the picture of health, and as any one should judge the lease of a long life. But in fact, we do not know when death will knock at our door. They leave many friends and relatives to mourn their loss. May the eternal light of Heaven shine upon them.

L. P. Hughes says that Jas. O'Donnell's visits reminds him of successful newspapermen: first they were weekly, grew to be semi-weekly, next tri-weekly, and now they are daily, with a Sunday supplement. Jim says pretty soon he will issue an extra.

Judge Pilon is the owner of one of the most vicious animals of Wallace. It is a colt he purchased at the Maloney sale for the sum of \$200. He took the colt home by means of a lasso and now offers \$25 to any man who has the nerve to throw a harness on him. Horse breakers apply at once.

Jas. Nangle predicts an early spring. Jim says the event always verifies his predictions. Jim is getting astrology down fine.

In the recent Butters failure, grain dealers of Ottawa, S. Jamison & Son were heavy losers. They had 2,000 bushels of grain stored there and now lose the whole.

Thomas White, E. J.'s foreman, was the guest of Miss Rex Hoxie quite recently.

Senator Corcoran and George Gahan were visiting in Ophir last Sunday.

Frank O'Neil has given up in utter despair.

Ed. O'Donnell was the guest of the Miss Kays Monday evening.

William Murch is all smiles. It is a twelve pound boy. Tom Burke is also too happy for anything. Same cause.

Pat Galvin is low with sciatic rheumatism. Mrs. E. Calvin is also in a critical condition.

RAMBLER.

WALLACE, March 20th, '87.—The ground is covered with snow again which makes it assume all the appearance of winter.

Some of the early farmers have sown their wheat and others their oats. I think it is early enough yet to sow either.

There is more sickness in this town this winter than has been in ten years.

Miss Katie Pennessy, P. Galvin, John Corrigan, Edmund O'Donnell, and Ed. Caton, who has been on the sick list these two weeks or more, are improving rapidly.

Wm. Dwyer has left our town and moved to Dayton P. Sorry to lose you, William.

Election time is rolling around, so are the office seekers. John McDowell, Ed. Robinson and J. Ford are in the field for the supervisorship. The two former mentioned possess all the qualities requisite to make a No. 1 supervisor, while Mr. Ford's are too well known for comment. Always vote for a man who is not interested in other towns.

Geo. Flory, one of our rock rooted democrats is out for re-election to the office of town clerk. George has discharged the duties pertaining to the office during the past year with credit to himself and to the town. His familiarity with the road laws would be of great value to the commissioners if he were re-elected. His opponent, Mr. Kiley, would undoubtedly make a good clerk.

Jno. Maher is an aspirant to the office of collector. Jno. is a man of small form and a large family, and if there is any remuneration in the office he should be elected, and without a doubt he will, for he has no opponent, for as yet no one is heard of who has the hardihood of heart to run against him.

Tom Fogarty is out for re-election to the office of assessor. Tom has assessed with out fear or favor during the past year, and to the satisfaction of the people generally. Tom is the right man in the right place and should and will be his own successor.

The Judge is not out for re-election. He says there is no money in the office.

RAMBLER.

From Grand Ridge.

The chirp of the robin and the warble of the lark help to impress us that spring is at hand once more.

The merchants in Grand Ridge have been very busy this week, as they are laying in a large spring stock.

The roads are passable once more.

The Grand Ridge school closes this week.

O. B. Friesby has sold out to Geo. Doyle, who will run the restaurant in the future.

Mr. Doyle is making quite a radical change in the appearance of the room, and we predict that he will be a live man in the business.

Geo. Porter had the misfortune to miss the log of wood at which he was chopping, letting the ax strike his foot, and by so doing he has been compelled to rest a week.

Mr. R. M. Antram and Mr. Taylor and Geo. Woodward were called to their old home in Pennsylvania one day last week on account of the severe illness of their father.

Joseph Boyd and S. H. Yocum have been on the sick list this week.

There was a social at Hartford's Tuesday evening. A good time is reported.

Mr. David Anderson is improving the town by putting up a new house in the east part.

Frank Hook and Ralph Ford, of Spring Valley, are spending a few days in circulating among old friends.

Mr. and Miss Hepler, Mr. Cole and Miss Billings, all of Munster, were the guests at the "Porter House" over Sabbath.

There will be a lecture upon the "Holy Land" at the Presbyterian church Friday evening.

The country is being thoroughly canvassed by the Sandwich fruit agents, who are said to be mashers. "So, girls, look out for the boys, I say."

Surprised? Well, I should say so! On Thursday evening, March 10, the young people of this vicinity gathered at the residence of John Bati. The mystery seemed to be why all the friends should call upon the same evening, but upon investigation it was found that Charley had reached his 19th birthday. Charley did not have his face washed or his boots blacked, but that was soon done, and the whole crowd seemed to catch the spirit of the occasion. Music and games were indulged in until the supper bell called them to an elegant repast for the boys did not forget that they would get hungry, but had made ample provision in that direction. When all had satisfied their appetites and were once more seated in the parlors a beautiful Bible was presented as a birthday present, after which the fun went on as usual until the clock told the hour of departure was at hand. The evening was an enjoyable one, and the young folks

certainly feel thankful for the kind reception and entertainment given by Mr. and Mrs. Bati.

Mr. Tom Roe is some better than at the last writing.

A. N. Porter has finished his school and will put in his time reading law this summer.

The Grand Ridge boys were defeated in a match game of ball the other day. Boys, that will never do. Why not organize and show the metal that is in you.

X.

From Ophir.

Ophir, March 22, 1887.—The weather is lovely, the roads are fine and everybody feels happy in the thought that grim winter has at last gotten a move on himself and crawled away to the ice-bound regions whence he came.

Our merchants are filling up their stores in anticipation of a heavy trade the coming season, and we believe that their expectations will be realized.

Miss Kate McGrath, of Freedom, was the guest of Miss Campbell a few days the past week.

James Garland smiles like a huge sunflower, and You and I tumble to it. It is because he has just gotten a move on himself and crawled away to the ice-bound regions whence he came.

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SCIENCE AND PROGRESS.

A METHOD OF MAKING SANDPAPER WITH PULVERIZED GLASS.

Deane Thrown Upon the Cavern Theory of Earthquakes by Professor O'Reilly. An Interesting Experiment—Capillarity and Density of Liquids.

An experiment that anybody can try, and one that may be utilized in a lecture course, is illustrated in the accompanying cut. It is an experiment on the capillarity and density of liquids. The Scientific American gives the following directions for its performance:



AN EXPERIMENT ANYBODY MAY TRY.

Take two glasses (clear glasses, for example), of exactly the same diameter at the rim, and immerse them in a pool of water. Before removing them from the liquid, place them rim to rim, so that both shall remain full of water, as shown in the figure. We shall thus have two glasses full of water and containing no air. It will now be easy, by varying with caution, to separate them slightly so as to leave a small space between their edges. Now take a third glass containing wine, and pour the latter, drop by drop, on the foot of the upper glass and allow it to spread over the latter's surface. Upon reaching the line of separation, the wine, instead of continuing its descent, will be seen to enter in streamlets between the two glasses and rise slowly in the upper one, owing to the difference in density of the wine and water. It is possible in this way to color the water in the upper glass entirely red without tinging that in the lower one.

The wine keeps to the upper glass through the action of capillarity, and rises therein, as before stated, by reason of the difference in density of the two liquids. We must add that the two glasses should be placed on a tray, or something of the kind, in order that the excess of wine may be caught, since considerable trickles down the lower glass, while but a fraction of it rises in the upper one.

Pulverized Steatite for Walls.

Recent accounts make it appear that pulverized steatite is coming into use quite extensively as a finish or covering for walls and ceilings. It is simply soapstone; it takes a high polish, is pearl gray in tint, is said to present the best possible surface for painting, either in oil or water color, and, what is very desirable, will neither crack nor chip. It is non-absorbent; that is, it is not washed with out injury; nails can be driven into it without damage; when subject to heat, moisture and chemical fumes, it gives no smell; and it does not turn yellow with age. It is thought to be specially adapted for hospitals, factories, cellars, markets, etc.

Sand Paper Made with Powdered Glass.

Sand paper is at present made with powdered glass instead of sand. The American Artizan tells how it is done: The glass is readily pulverized by heating it red hot and throwing it into water, and finishing the powdering in an iron mortar. By the use of sieves of different sizes of mesh, the powder can be separated into various grades, from the finest dust to very coarse; and these should be kept separate. A strong paper is tacked down and covered with a strong size of glue, and the surface covered with powdered glass of the desired fineness. When the glue is dry, the surplus glass is shaken or brushed off. Muslin is better than paper and lasts much longer in use.

Cavern Theory of Earthquakes.

Some doubt is thrown upon the "cavern theory" of the minor earthquakes by the publication of Prof. O'Reilly's catalogue of British earthquakes and its accompanying map. The data show that during the period embraced in the view, Ireland has been less subject to earthquakes than England and Wales. In the face of this revelation is the fact that Ireland is remarkably and excessively undermined by cavernous formations, so that if they really give rise to earthquake shocks, it should have suffered more from them than any other country represented.

Origin of Comets.

While agreeing in general with the theory that comets have their origin beyond the limits of the solar system, Professor Daniel Kirkwood finds proof, he avers, that some of those of short periods are minor planets, whose orbits in the asteroid zone have been changed through the perturbing influence of the large planets. The third comet of 1884, for instance, seems to have been drawn from the Asteroids by Jupiter in May, 1873.

Adulteration of White Lead.

To ascertain if white lead has been adulterated by permanent white or sulphate of baryta—the commonest adulterant—hold a small quantity of it in a glass test tube with nitric acid diluted with an equal measure of water. The white lead dissolves, but the baryta remains as a white residue. This should be allowed to settle, the clear liquid poured off and the deposit again treated with nitric acid and then boiled with water.

Dedicated Bodies From Dakota.

Five bodies taken by a miner from a cave in the Bad Lands of Dakota and sent to the Smithsonian institution, are simply dried up, not petrified. They are, however, in a remarkable state of preservation. Scientific men who have seen them say they belong to a race which existed 2,000 years ago. This will be a very important addition to the collection of dedicated bodies now on exhibition in the national museum.

How Vultures Find Carrion.

The methods by which vultures find carrion is disclosed by their habit of distributing themselves like sentinels over wide tracts of country. Their keen eyes, as they circle over miles of territory, scan every object, telegraphing to the adjoining sentinel, many miles away, the discovery of prey. In this way, during the Crimean war, it is said that the vultures of northern Africa flocked in scores around the contending armies, coming from thousands of miles.

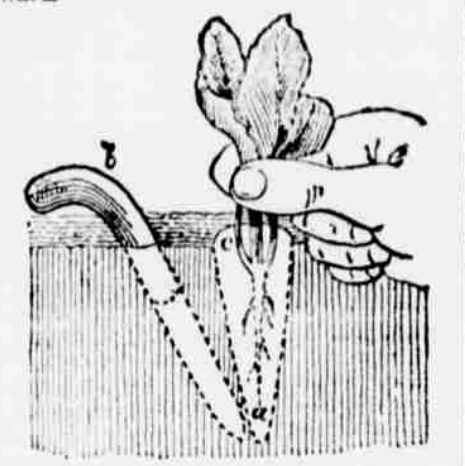
FARM AND GARDEN.

FEEDING RATIONS FOR MILCH COWS. HORSES THAT WILL SELL.

Directions for Building a Convenient and Economical Piggy—Hints Worthy of Consideration Wherever Vegetables Are Grown, Either for Home or Market.

When plants are removed from the soil in which the seed germinated, a considerable shock is experienced unless great care is exercised in transplanting them to their new bed. The important operation of transplanting is properly performed when the equilibrium between the functions of the roots and the leaves is soon re-established. If plants are transplanted to a wet and particularly heavy soil, the part pressed to the roots will bake and contract, leaving open spaces near the roots. The earth into which plants are to be shifted should be freshly dug, as this seems to encourage an early emission of young rootlets; and it should be as fine as possible, so that every part of the roots may come in contact with soil and moisture.

If the earth has been freshly stirred and is moist enough to allow planting holes to be made by the dibble, without caving in, and the soil is not very sandy, new roots will soon begin to grow, and the warm soil will push these rapidly forward.



PROPER USE OF THE DIBBLE.

A. Oehler, in some very sound advice given to truck farmers of the south, furnishes directions that may be safely followed in any locality where vegetable and strawberry plants are grown. Following are some of his suggestions: In transplanting such plants as the strawberry, the fibrous roots should be opened out as much as possible, while the root of the tap root plant, as the cabbage, beet, etc., should be placed regularly up and down and not bent upon itself. If such root is bent, the nutritive matter in descending from the boxes will be interrupted at the bend, and new rootlets will be slow to appear beyond it. In transplanting the soil ought to be uniformly, but not harshly, pressed to the roots their entire length, from the extreme lower point upward.

With the exception of asparagus, horse radish, onions and such plants as emit new roots along the lower portion of the stem, as tomatoes, cabbage, etc., it is a safe rule to put down the plant to the depth of which it originally grew. In sandy soil it sometimes becomes necessary, in a drought, during an entire transplanting season, to water the plants after they are set out. In this case the watered surface should be covered with dry soil to prevent baking.

In a loose, fine, light soil, free from sticks, stones, pebbles, etc., the hand alone is often used in transplanting on a small scale, but either the planting stick or dibble, or the trowel, is implement in the hands of an unskilled workman. In using the dibble, it is thrust into the soil to at least the full depth at which the plant is to be inserted, the hole is then widened by a rotary motion of the implement. To insert the plant properly, it is held between the thumb and the index finger of the left hand, and thus placed in the hole; the dibble is then plunged into the ground two or three inches from the plant, in a direction with its point toward and a little below the end of the root. The engraving, taken from Truck Farming, shows the hole made by the dibble with the root of the plant within it. The dibble is thrust into the ground, ready to fix the root in place, by using the point as a fulcrum and moving the handle of the dibble from b to c the soil will be pressed to the root for its entire length from a to c. If this be done with sufficient force, it will fix the plant firmly in the soil. If, on the other hand, the dibble is inserted perpendicularly or parallel with the plant instead of at an angle, or if it is partly withdrawn before the movement from b to c is completed, the soil will only be pressed to the root at the top, leaving its more important part loosely suspended in an open excavation of the soil.

Planting proceeds most conveniently from left to right. When the trowel is employed the operation is the same, except that the implement is inserted in front of the plant instead of at its side.

Horses That Sell Well.

There is no branch of the